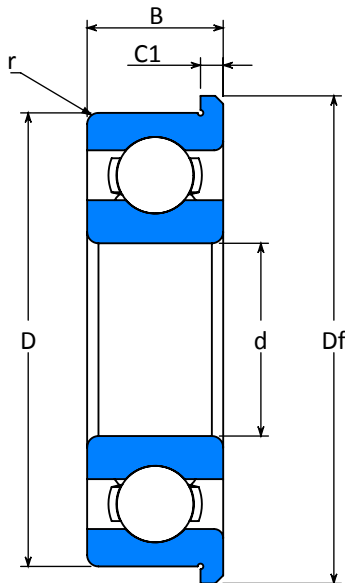
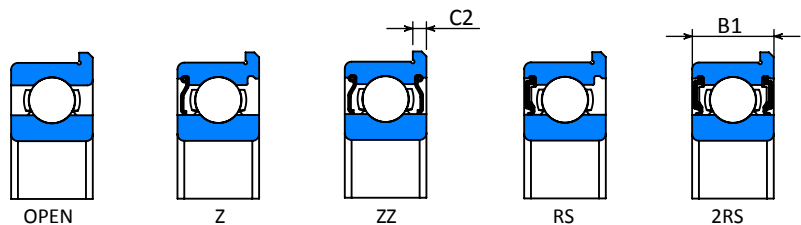


Flanged Miniature & Instrument Ball Bearing

d 1 – 3 mm



- Ring Material:** Standard AISI 52100 or 440C stainless steel equivalent.
- Ball Material:** Silicon nitride (SiN4) ceramic balls are available upon request.
- Closures:** Open, shields, and seals.
- Seal materials:** NBR, EPDM, ACM, FKM and Silicone
- Seal contact type:** Non-contact, light, standard and tight contact
- Cage Design:** Crimped steel ribbon, crown steel cage, molded plastic cage, etc.
- Radial clearance:** C0 to C5, or as specified by the customer
- Precision level:** Abec 1 to Abec 5
- Bearing noise level:** Standard (i.e. Z1 or V1) to EMQ (Electric Motor Quality)
- Lubricant:** Special low noise and low/high temperature are available as needed

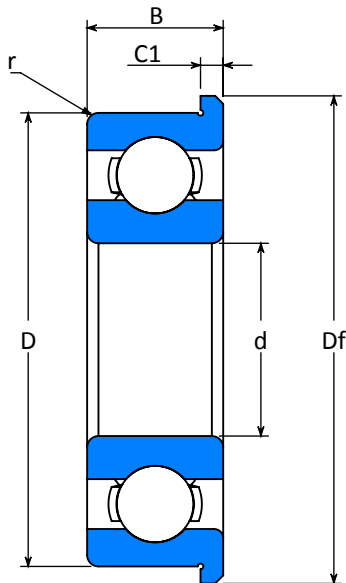


Bearing No.	Dimensions are in mm								Basic Load Rating		Weight (g)
	Bore d	OD		Flange Width		Width		Radius r* min	(N)		
				Open	Shield/Seal	Open	Shield/Seal		Dynamic Cr	Static Cor	
		D	Df	C1	C2	B	B1				
F681	1	3	3.8	0.3	-----	1	-----	0.05	80	22	0.04
F691	1	4	5.0	0.5	-----	1.6	-----	0.10	107	40	0.14
MF41X	1.2	4	4.8	0.4	-----	1.8	2.5	0.10	107	40	0.12
F681X	1.5	4	5.0	0.4	-----	1.2	2	0.05	89	31	0.09
F691X	1.5	5	6.5	0.6	0.8	2	2.6	0.15	129	49	0.23
F601X	1.5	6	7.5	0.6	0.8	2.5	3	0.15	245	98	0.42
F682	2	5	6.1	0.5	0.6	1.5	2.3	0.08	129	49	0.16
MF52	2	5	6.2	0.6	0.6	2	2.5	0.10	129	49	0.21
F692	2	6	7.5	0.6	0.8	2.3	3	0.15	245	98	0.35
MF62	2	6	7.2	0.6	-----	2.5	2.5	0.15	245	98	0.36
MF72	2	7	8.2	0.6	0.6	2.5	3	0.15	294	129	0.52
F602	2	7	8.5	0.7	0.9	2.8	3.5	0.15	294	129	0.60
F682X	2.5	6	7.1	0.5	0.8	1.8	2.6	0.08	156	62	0.25
F692X	2.5	7	8.5	0.7	0.9	2.5	3.5	0.15	294	129	0.51
MF82X	2.5	8	9.2	0.6	-----	2.5	-----	0.20	205	76	0.62
F602X	2.5	8	9.5	0.7	0.9	2.8	4	0.15	285	107	0.74
MF63	3	6	7.2	0.6	0.6	2	2.5	0.10	156	62	0.27
F683	3	7	8.1	0.5	0.8	2	3	0.10	294	129	0.37
MF83	3	8	9.2	0.6	-----	2.5	-----	0.15	285	107	0.56
F693	3	8	9.5	0.7	0.9	3	4	0.15	285	107	0.70
MF93	3	9	10.2~	0.6	0.8	2.5	4	0.20	440	187	0.81
F603	3	9	10.5	0.7	1	3	5	0.15	440	187	1.00
F623	3	10	11.5	1	1	4	4	0.15	440	187	1.85

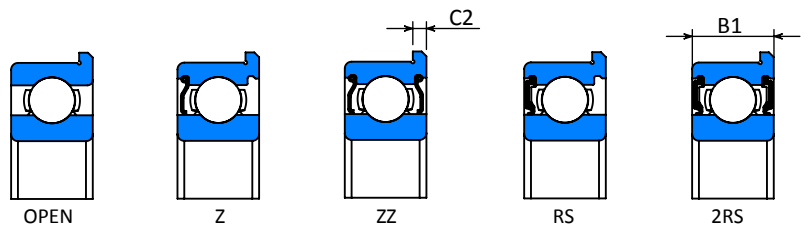
*Maximum fillet which corner radius of bearing will clear
 ~Flange diameter 0.4 mm greater for shielded bearings

Flanged Miniature & Instrument Ball Bearing

d 4— 6 mm



- Ring Material:** Standard AISI 52100 or 440C stainless steel equivalent.
- Ball Material:** Silicon nitride (SiN4) ceramic balls are available upon request.
- Closures:** Open, shields, and seals.
- Seal materials:** NBR, EPDM, ACM, FKM and Silicone
- Seal contact type:** Non-contact, light, standard and tight contact
- Cage Design:** Crimped steel ribbon, crown steel cage, molded plastic cage, etc.
- Radial clearance:** C0 to C5, or as specified by the customer
- Precision level:** Abec 1 to Abec 5
- Bearing noise level:** Standard (i.e. Z1 or V1) to EMQ (Electric Motor Quality)
- Lubricant:** Special low noise and low/high temperature are available as needed

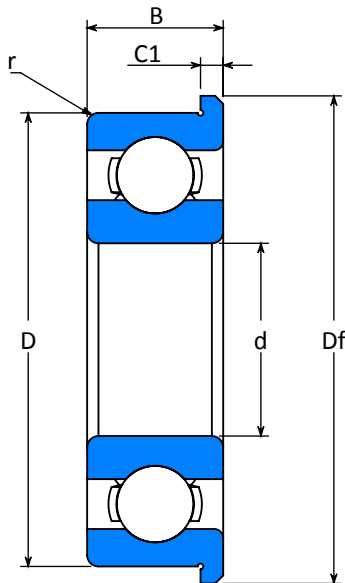


Bearing No.	Dimensions are in mm								Basic Load Rating		Weight (g)
	Bore d	OD D Df		Flange Width		Width		Radius r* min	(N)		
				Open C1	Shield/Seal C2	Open B	Shield/Seal B1		Dynamic Cr	Static Cor	
		Open	Shield/Seal	Open	Shield/Seal	Dynamic	Static				
MF74	4	7	8.2	0.6	0.6	2	2.5	0.10	258	111	0.29
MF84	4	8	9.2	0.6	0.6	2	3	0.15	391	147	0.44
F684	4	9	10.3	0.6	1	2.5	4	0.10	440	187	0.70
MF104	4	10	11.2~	0.6	0.8	3	4	0.20	440	187	1.13
F694	4	11	12.5	1	1	4	4	0.15	547	254	1.91
F604	4	12	13.5	1	1	4	4	0.20	743	343	2.53
F624	4	13	15	1	1	5	5	0.20	996	480	3.38
F634	4	16	18	1	1	5	5	0.30	1334	623	5.73
MF85	5	8	9.2	0.6	0.6	2	2.5	0.10	276	138	0.33
MF95	5	9	10.2	0.6	0.6	2.5	3	0.15	498	205	0.59
MF105	5	10	11.2~	0.6	0.8	3	4	0.15	512	245	1.05
MF115	5	11	12.6	-----	0.8	-----	4	0.15	547	254	1.23
F685	5	11	12.5	0.8	1	3	5	0.15	547	254	1.37
F695	5	13	15	1	1	4	4	0.20	832	400	2.79
F605	5	14	16	1	1	5	5	0.20	1019	489	3.90
F625	5	16	18	1	1	5	5	0.30	1334	623	5.37
F635	5	19	22	1.5	1.5	6	6	0.30	1779	845	9.49
MF106	6	10	11.2	0.6	0.6	2.5	3	0.15	547	254	0.65
MF126	6	12	13.2~	0.6	0.8	3	4	0.20	832	365	1.38
F686	6	13	15	1	1.1	3.5	5	0.15	832	400	2.25
F696	6	15	17	1.2	1.2	5	5	0.20	1334	623	4.34
F606	6	17	19	1.2	1.2	6	6	0.30	1334	623	6.58
F626	6	19	22	1.5	1.5	6	6	0.30	1779	845	9.09

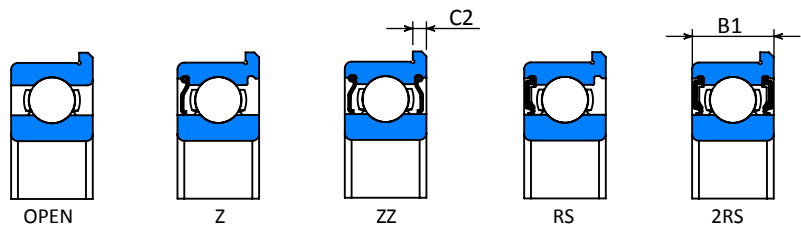
*Maximum fillet which corner radius of bearing will clear
 ~Flange diameter 0.4 mm greater for shielded bearings

Flanged Miniature & Instrument Ball Bearing

d 7— 9 mm



- Ring Material:** Standard AISI 52100 or 440C stainless steel equivalent.
- Ball Material:** Silicon nitride (SiN4) ceramic balls are available upon request.
- Closures:** Open, shields, and seals.
- Seal materials:** NBR, EPDM, ACM, FKM and Silicone
- Seal contact type:** Non-contact, light, standard and tight contact
- Cage Design:** Crimped steel ribbon, crown steel cage, molded plastic cage, etc.
- Radial clearance:** C0 to C5, or as specified by the customer
- Precision level:** Abec 1 to Abec 5
- Bearing noise level:** Standard (i.e. Z1 or V1) to EMQ (Electric Motor Quality)
- Lubricant:** Special low noise and low/high temperature are available as needed



Bearing No.	Dimensions are in mm								Basic Load Rating		Weight (g)
	Bore d	OD D Df		Flange Width		Width		Radius r* min	(N)		
				Open C1	Shield/Seal C2	Open B	Shield/Seal B1		Dynamic Cr	Static Cor	
		Open	Shield/Seal	Open	Shield/Seal	Dynamic	Static				
MF117	7	11	12.2	0.6	0.6	2.5	3	0.15	449	205	0.72
MF137	7	13	14.2~	0.6	0.8	3	4	0.20	881	391	1.70
F687	7	14	16	1	1.1	3.5	5	0.15	899	458	2.48
F697	7	17	19	1.2	1.2	5	5	0.30	1045	534	5.65
F607	7	19	22	1.5	1.5	6	6	0.30	1713	801	8.66
F627	7	22	25	1.5	1.5	7	7	0.30	2580	1290	14.20
MF128	8	12	13.2~	0.6	0.8	2.5	3.5	0.15	512	254	0.82
MF148	8	14	15.6	0.8	0.8	3.5	4	0.20	881	391	2.09
F688	8	16	18	1	1.1	4	5	0.20	1379	712	3.54
F698	8	19	22	1.5	1.5	6	6	0.30	1268	645	8.35
F608	8	22	25	1.5	1.5	7	7	0.30	2580	1290	13.40
F689	9	17	19	1	1.1	4	5	0.20	1379	636	3.97
F699	9	20	23	1.5	1.5	6	6	0.30	2349	1028	9.51
F609	9	24	27	1.5	1.5	7	7	0.30	2580	1246	-----

*Maximum fillet which corner radius of bearing will clear
 ~Flange diameter 0.4 mm greater for shielded bearings